

ABSTRACT

This disclosure describes isolated or purified deoxyribonucleotide (DNA) sequences, useful for the 5 development of antibacterial agents, which contain the coding sequences of bacterial pathogenesis genes or essential genes, which are expressed *in vivo*. It further describes isolated or purified DNA sequences which are portions of such bacterial genes, which are useful as probes to 10 identify the presence of the corresponding gene or the presence of a bacteria containing that gene. Also described are hypersensitive mutant cells containing a mutant gene corresponding to any of the identified sequences and methods 15 of screening for antibacterial agents using such hypersensitive cells. In addition it describes methods of treating bacterial infections by administering an antibacterial agent active against one of the identified targets, as well as pharmaceutical compositions effective in such treatments.